



Standard Specification for Wood-Cleated Panelboard Shipping Boxes¹

This standard is issued under the fixed designation D 6251/D 6251M; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification covers the fabrication and closure of empty and full wood-cleated, hereafter referred to as wood-cleated, panelboard boxes. These boxes are intended for use as containers for domestic and overseas shipment of general materials and supplies, not exceeding 1000 lb [454 kg] depending on box type (see 10.1).

1.2 Wood-cleated panelboard shipping box performance is dependent on its fabricated components and subsequent assembly; therefore, a variety of types, classes, styles, and treatments reflecting varied performance are specified. This specification, however, does not cover wood-cleated panelboard box performance under all atmospheric, handling, shipping, and storage conditions.

1.3 If the use of other construction methods or techniques is acceptable and permitted (see 5.1.17), the resulting packaging systems shall be of equal or better performance than would result from the use of these specified materials and procedures. The appropriate distribution cycle, specified in Practice D 4169, can be used to develop comparative procedures and criteria.

1.4 The values stated in either inch-pound units or SI units are to be regarded separately as standard. Within the text, the SI units are shown in brackets. The values stated in each system are not exact equivalents; therefore, each system must be used independently of the other. Combining values from the two systems may result in nonconformance with the standard. See IEEE/ASTM SI 10 for conversion of units.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of the standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

- D 996 Terminology of Packaging and Distribution Environments²
- D 1990 Practice for Establishing Allowable Properties for Visually-Graded Dimension Lumber from In-Grade Tests of Full-Size Specimens³
- D 3951 Practice for Commercial Packaging²
- D 3953 Specification for Strapping, Flat Steel and Seals²
- D 4169 Practice for Performance Testing of Shipping Containers and Systems²
- D 4727/D 4727M Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes²
- D 6199 Practice for Quality of Wood Members of Containers and Pallets²
- F 1667 Specification for Driven Fasteners, Nails, Spikes, and Staples⁴
- IEEE/ASTM SI 10 Standard for Use of the International System of Units (SI): The Modern Metric System⁵
- 2.2 *Federal Specifications:*
 - A-A-58078 Plastic Board (For Packaging Applications)⁶
 - FF-F-133 Fasteners, Wood Joint, Corrugated – (Saw Edge)⁶
- 2.3 *Code of Federal Regulations:*
 - CFR Parts 107-180 Title 49, Hazardous Materials Regulations⁷
- 2.4 *APA—The Engineered Wood Association:*
 - PRP-108 Performance Standards and Policies for Structural-Use Panels⁸
 - PS1-95 Construction and Industrial Plywood⁸
 - PS2-92 Performance Standard for Wood-Based Structural-Use Panels⁸
- 2.5 *American Wood-Preservers' Association (AWPA):*
 - P8-99 Standard for Oil-Borne Preservatives⁹

² Annual Book of ASTM Standards, Vol 15.09.

³ Annual Book of ASTM Standards, Vol 04.10.

⁴ Annual Book of ASTM Standards, Vol 01.08.

⁵ Annual Book of ASTM Standards, Vol 14.02.

⁶ Available from the Federal Supply Service Bureau, Specification Section, Suite 8100, 480 L'Enfant Plaza, SW, Washington, DC 20408.

⁷ Available from the Superintendent of Documents, US Government Printing Office, Mail Stop: SSOP, Washington, DC 20402-9328.

⁸ Available from APA—The Engineered Wood Association, 7011 South 19th Street, P.O. Box 11700, Tacoma, WA 98411-0700.

⁹ Available from American Wood-Preservers' Association, P.O. Box 5690, Granbury, TX 76049.

¹ This specification is under the jurisdiction of ASTM Committee D10 on Packaging and is the direct responsibility of Subcommittee D10.26 on Shipping Containers, Crates, Pallets, Skids, and Related Structures.

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